

Missouri's Air Quality

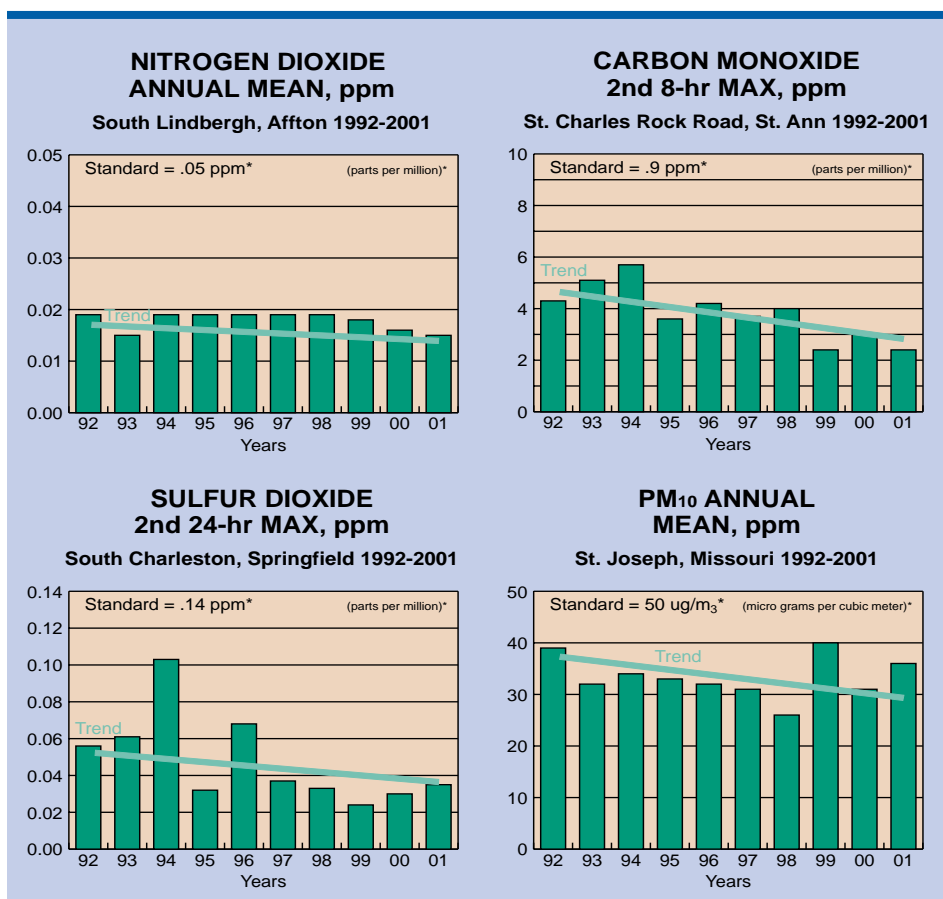
The air quality in Missouri meets EPA's accepted levels, except for two specific areas. During the summer months, the St. Louis area has repeatedly exceeded the ozone standard and is designated by EPA as a moderate-level "nonattainment area" for ozone. This area includes the city of St. Louis and Franklin, Jefferson, St. Charles and St. Louis counties (see page 17), as well as Madison, Monroe and St. Clair counties in Illinois. A small area near a lead smelter in Jefferson County still exceeds federal standards for airborne lead (see page 22).

Air Quality Trends

The department monitors air concentrations of the six criteria pollutants at selected locations throughout the state. Most areas of the state are in **attainment** of the air quality standards.

The graphs below are representative of general trends of ambient air data from four pollutants including CO, NO_x, SO_x and PM₁₀. See Major Air Pollutants on page 11 for more information on sources of these pollutants and their health effects. The overall trend as shown by the four graphs below is improved air quality.

Air Quality Trends at Selected Locations



Emission Trends

In 1999, Missouri expanded its emission inventory submittal to EPA to add area and mobile sources to the point source information. Area sources are the smaller businesses and local and regional activities such as pesticide applications, highway painting and open burning. On-Road mobile sources encompass passenger and commercial vehicles, while off-road mobile sources include construction equipment, motorized recreation vehicles and small machines like lawnmowers.

The graphs at the right show the total emissions of the criteria pollutants

that Missouri facilities reported for the years 1993 to 2000. As reflected in the graphs, facilities have generally reported decreased emissions. Since 1993, facilities have reduced **PM₁₀** emissions 57 percent, while VOC emissions have dropped 42 percent. **Sulfur oxide** emissions dropped 46 percent since 1993. Industries have also reported a 26 percent decline in the emission of **NO_x** since 1993.

NO_x emissions are expected to continue to decline between now and 2007. EPA's **NO_x State Implementation Plan (SIP)** call will require a reduction in **NO_x** emissions of approxi-

mately 35 percent from the eastern one-third of Missouri. Missouri has a statewide **NO_x** rule that will achieve slightly more emission reductions from electrical generating units in the entire state. The tables below show relative contributions from major industrial sources.

Annual Reported Emissions

Top Point Emission Sources for NO _x	Tons of NO _x contributed by these sources in 2000	Percent of total
(1) Electricity Generation	163,432.45	80.6%
(2) Cement Production	16,355.26	8.1%
(3) Lime and Limestone Production	3850.10	1.9%
(4) Natural Gas	3265.18	1.6%
(5) Pipeline	2106.75	1.0%
(6) All Others	13,878.99	6.8%
Total:	202,888.72	

Top Point Emission Sources for PM ₁₀	Tons of PM ₁₀ contributed by these sources in 2000	Percent of total
(1) Electricity Generation	4,718.87	20.4%
(2) Lime and Limestone Production	3,536.55	15.3%
(3) Charcoal Production	3,091.76	13.4%
(4) Cement Production	2,826.67	12.2%
(5) Aluminum	718.75	3.1%
(6) Concrete	591.55	2.6%
(7) Fertilizer Manufacturing	519.94	2.2%
(8) All Others	7,139.38	30.8%
Total:	23,143.46	

Top Point Emission Sources for VOCs	Tons of VOCs contributed by these sources in 2000	Percent of total
(1) Charcoal Production	7,171.76	18.3%
(2) Automobile Production	5,065.53	12.9%
(3) Aluminum	3,008.44	7.7%
(4) Cement Production	2,090.62	5.3%
(5) Plastics Production	2,052.32	5.2%
(6) Electricity Generation	1,593.53	4.1%
(7) Metal Can Production	901.32	2.3%
(8) Printing	808.33	2.1%
(9) Soybean Processing	785.39	2.0%
(10) All Others	15,747.03	40.1%
Total:	39,224.28	

Top Point Emission Sources for SO _x	Tons of SO _x contributed by these sources in 2000	Percent of total
(1) Electricity Generation	248,505.16	72.1%
(2) Lead Refinery	57,521.49	16.7%
(3) Cement Production	11,769.25	3.4%
(4) Beer Production	6,292.80	1.8%
(5) Lime and Limestone Production	5,315.15	1.5%
(6) Chemicals	4,376.10	1.3%
(7) Aluminum	3,750.19	1.1%
(8) All Others	7,363.89	2.1%
Total:	344,894.03	

